IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A device for determining a value that is representative of accelerations in at least two mutually perpendicular directions ~~perpendicular to each other~~, the device comprising a sensor system including at least two accelerometers with which ~~the~~ acceleration in ~~each of~~ the mutually perpendicular directions ~~can be converted into an electric signal~~ is convertible into electric signals while the value ~~can be determined from the~~ is determinable by signal processing means from an electric ~~signals by signal processing means~~ signal formed from the electric signals, ~~characterized in that~~ wherein prior to the signal processing means ~~the~~ electric ~~signals can be added~~ signals from the at least two accelerometers are addable together by ~~means of~~ an adding element to form the electric signal, wherein outputs of the at least two

accelerometers are directly connected to the adding element to form the electric signal for processing by the signal processing means.

2. (Currently Amended) ~~A~~ The device as claimed in claim 1, ~~characterized in that~~ wherein in the adding element ~~the~~ connections conducting the electric signals are arranged in parallel.

3. (Currently Amended) ~~A~~ The device as claimed in claim 1, ~~characterized in that a~~ wherein the sensor system comprises at least a sensor which comprises a flexible strip made of piezoelectric material.

4. (Currently Amended) ~~A~~ The device as claimed in claim 1, ~~characterized in that~~ wherein the signal processing means comprise a signal amplifier, a bandpass filter and a processor.

5. (Currently Amended) An ergometer for measuring a value that is representative of a physical effort of an individual, the ergometer comprising a device that includes a sensor system having at least two accelerometers with which ~~the~~ acceleration in ~~each of~~

~~the~~ mutually perpendicular directions ~~extending perpendicularly to each other~~ can be converted into electric signals, while the value can be determined by signal processing means from an electric signal formed from the electric signals ~~by signal processing means~~, ~~characterized in that~~ wherein prior to the signal processing means the electric signals can be added together by ~~means of~~ an adding element to form an electric signal, wherein outputs of the at least two accelerometers are directly connected to the adding element to form the electric signal for processing by the signal processing means.

6. (Currently Amended) ~~An~~ The ergometer as claimed in claim 5, ~~characterized in that~~ wherein in the adding element ~~the~~ connections conducting the electric signals are arranged in parallel.

7. (Currently Amended) ~~Ergometer~~ The ergometer as claimed in claim 5, ~~characterized in that~~ wherein the ergometer comprises a database in which the value is correlated to ~~an energy value such as, for example~~ a nutritional value.

8. (Currently Amended) ~~Ergometer~~ The ergometer as claimed in claim 7, ~~characterized in that~~ wherein the ergometer comprises a memory in which energy values can be stored over a certain period of time.

9. (Currently Amended) ~~Ergometer~~ The ergometer as claimed in claim 7, ~~characterized in that~~ wherein the ergometer comprises a screen on which the instantaneous effort and/or average effort can be displayed in energy values over a certain period.

10. (Currently Amended) ~~An~~ The ergometer as claimed in claim 5, ~~characterized in that~~ wherein the ergometer comprises a coupling to which a computer can be connected, for transferring stored data from the ergometer to the computer.

11. (Currently Amended) ~~An~~ The ergometer as claimed in claim 5, ~~characterized in that~~ wherein the sensor system comprises at least a sensor that includes a flexible strip made of piezoelectric material.

12. (Currently Amended) ~~An~~ The ergometer as claimed in claim 5, ~~characterized in that~~ wherein the signal processing means comprise a signal amplifier, a bandpass filter and a processor.

13. (New) The device of claim 1, wherein the electric signals added by the adding element are output currents of the at least two accelerometers added to from a total current for processing by the signal processing means.

14. (New) The ergometer of claim 5, wherein the electric signals added by the adding element are output currents of the at least two accelerometers added to from a total current for processing by the signal processing means.

15. (New) A device for determining a value that is representative of accelerations in at least two mutually perpendicular directions, the device comprising:

a sensor system including at least two accelerometers for providing output currents;

an adder directly connected to the at least two accelerometers

for directly receiving the output currents and forming a total current; and

a processor configured to receive the total current for processing.